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Title: Today on Mars

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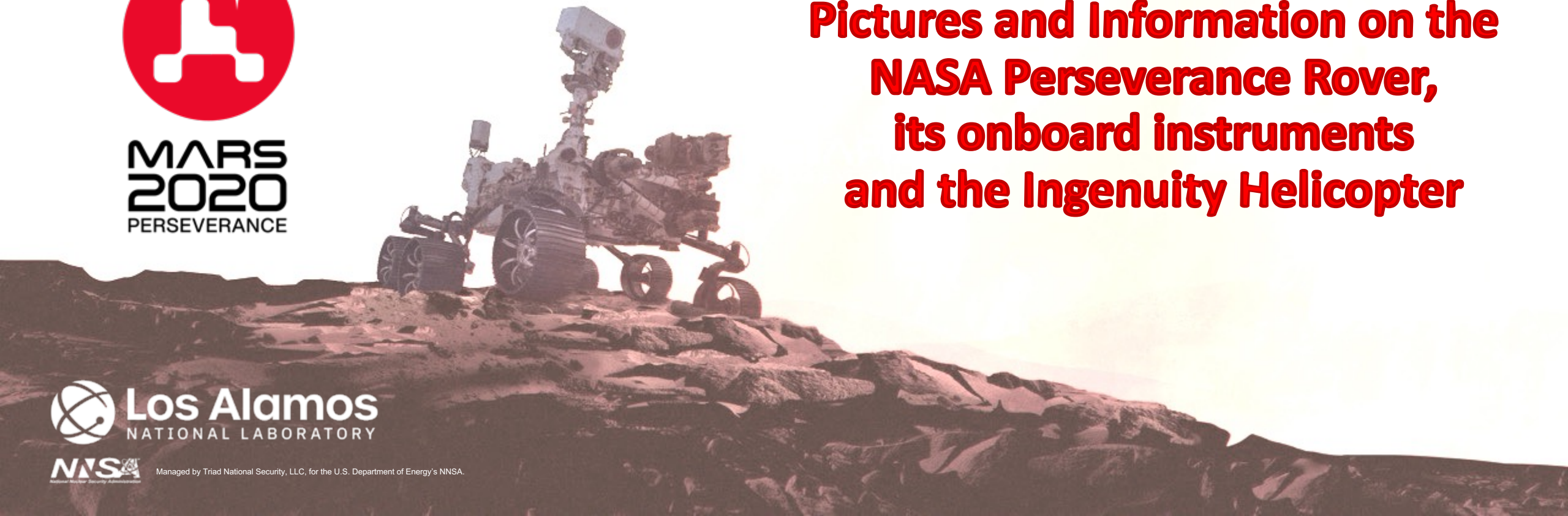
Today On Mars

MARS 2020
PERSEVERANCE



Pictures and Information on the NASA Perseverance Rover, its onboard instruments and the Ingenuity Helicopter

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NNSA

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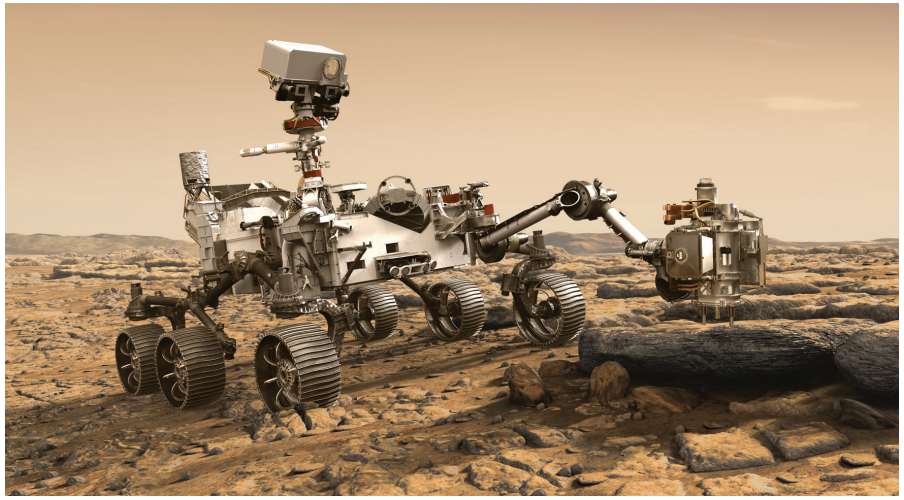
Mars 2020/Perseverance

Over the past two decades, missions flown by NASA's Mars Exploration Program have shown us that Mars was once very different from the cold, dry planet it is today. Evidence discovered by landed and orbital missions point to wet conditions billions of years ago. These environments lasted long enough to potentially support the development of microbial life.

The Mars 2020/Perseverance rover is designed to better understand the geology of Mars and seek signs of ancient life. The mission will collect and store a set of rock and soil samples that could be returned to Earth in the future. It will also test new technology to benefit future robotic and human exploration of Mars.

Key Objectives

- Explore a geologically diverse landing site
- Assess ancient habitability
- Seek signs of ancient life, particularly in special rocks known to preserve signs of life over time
- Gather rock and soil samples that could be returned to Earth by a future NASA mission
- Demonstrate technology for future robotic and human exploration



Mission Timeline

- Launch July 30, 2020 from Cape Canaveral Air Force Station, Florida
- Land on Mars on February 18, 2021 at the site of an ancient river delta in a lake that once filled Jezero Crater
- Spend at least one Mars year (two Earth years) exploring the landing site region

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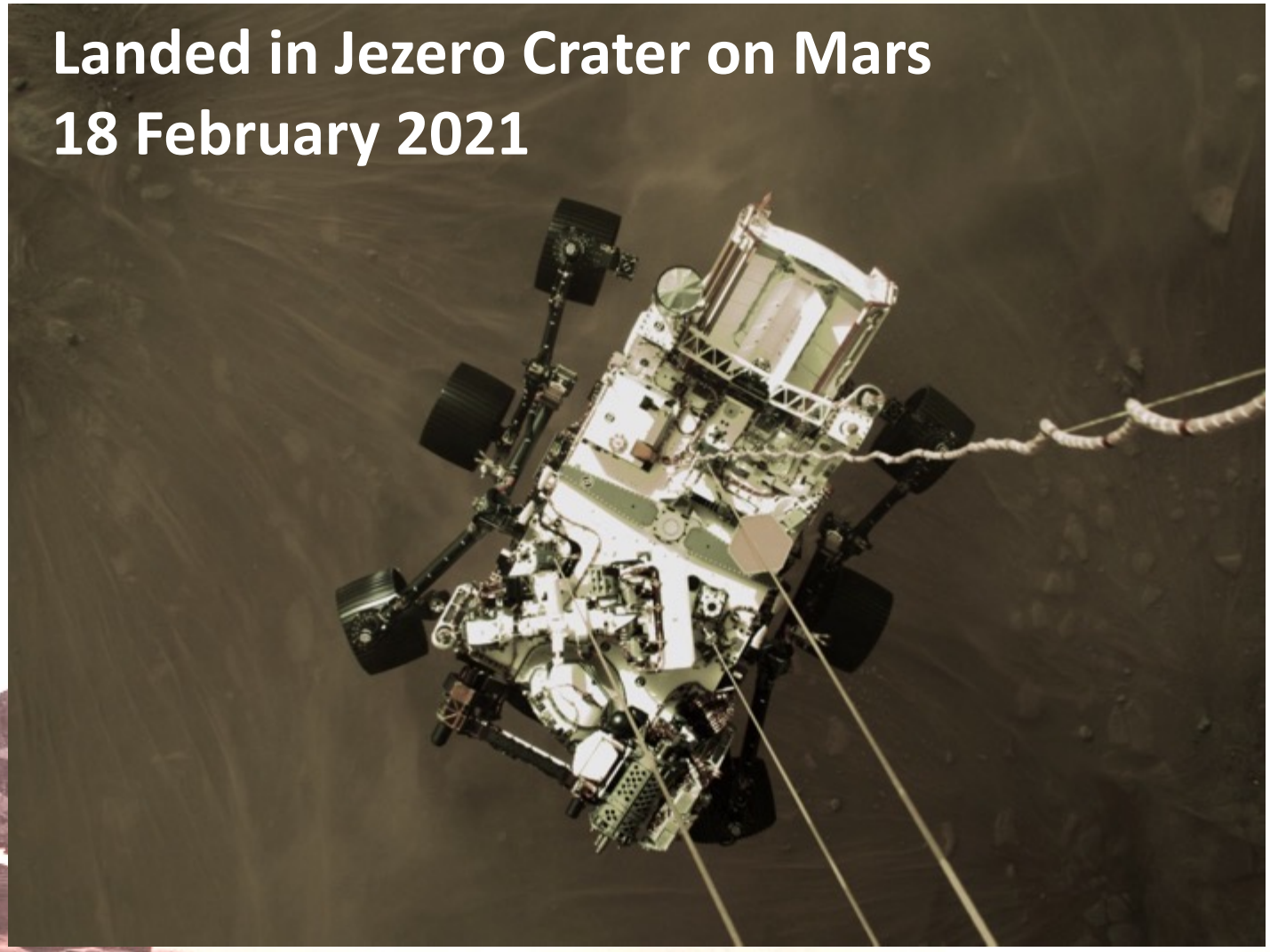
Images and information from https://mars.nasa.gov/mars2020/

Launch from Cap Canaveral 30 July 2020

Landed in Jezero Crater on Mars 18 February 2021



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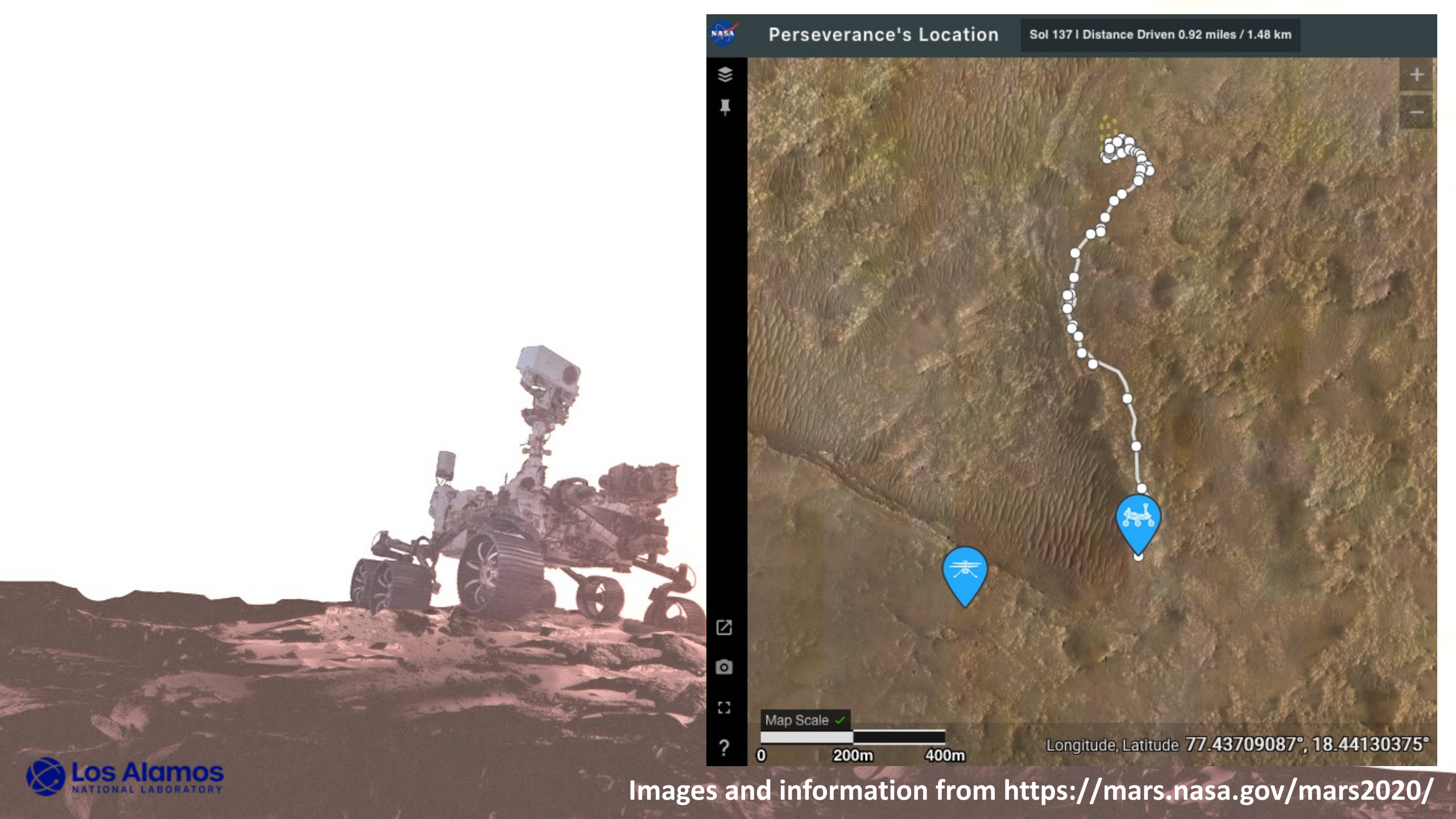

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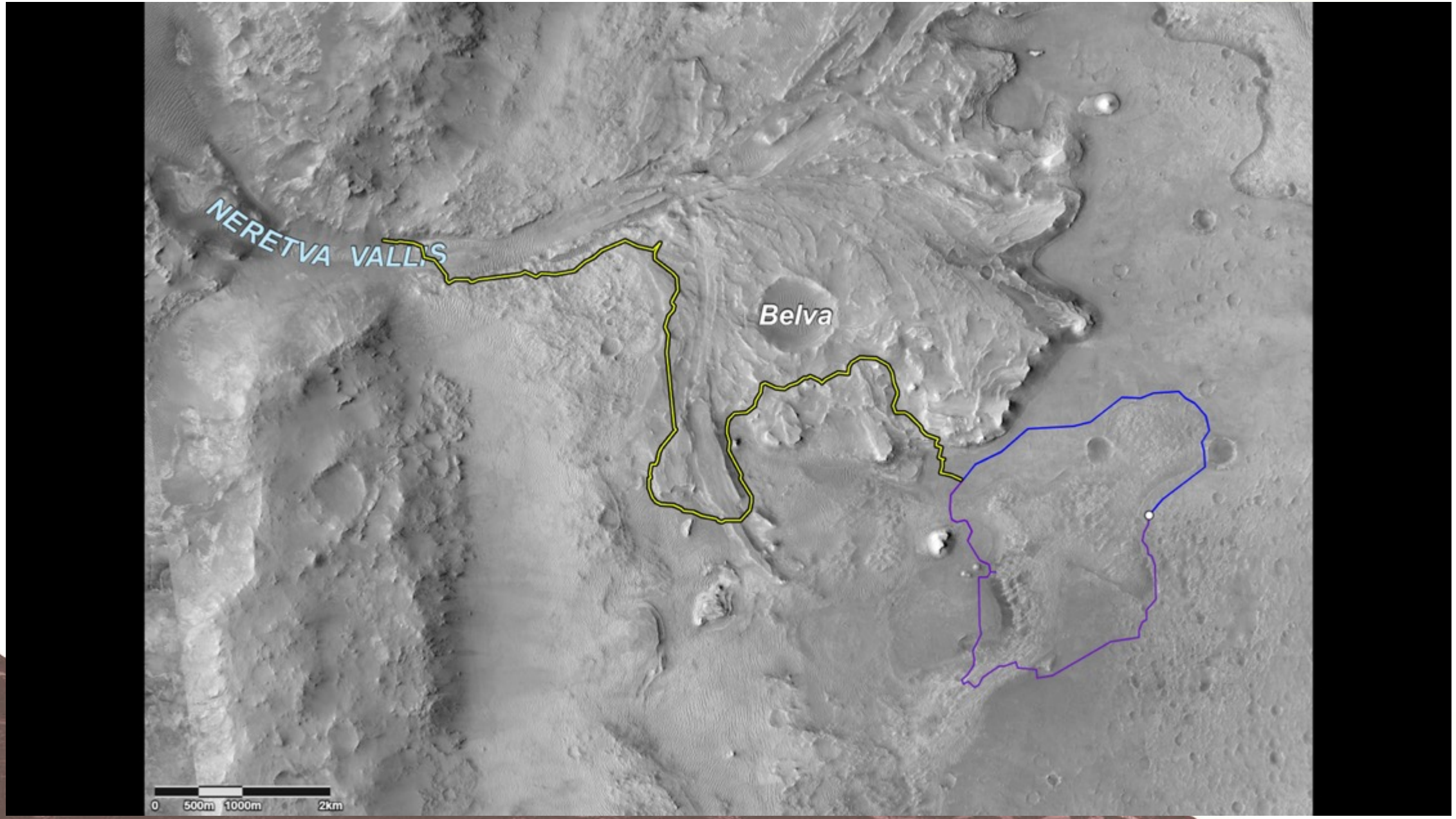

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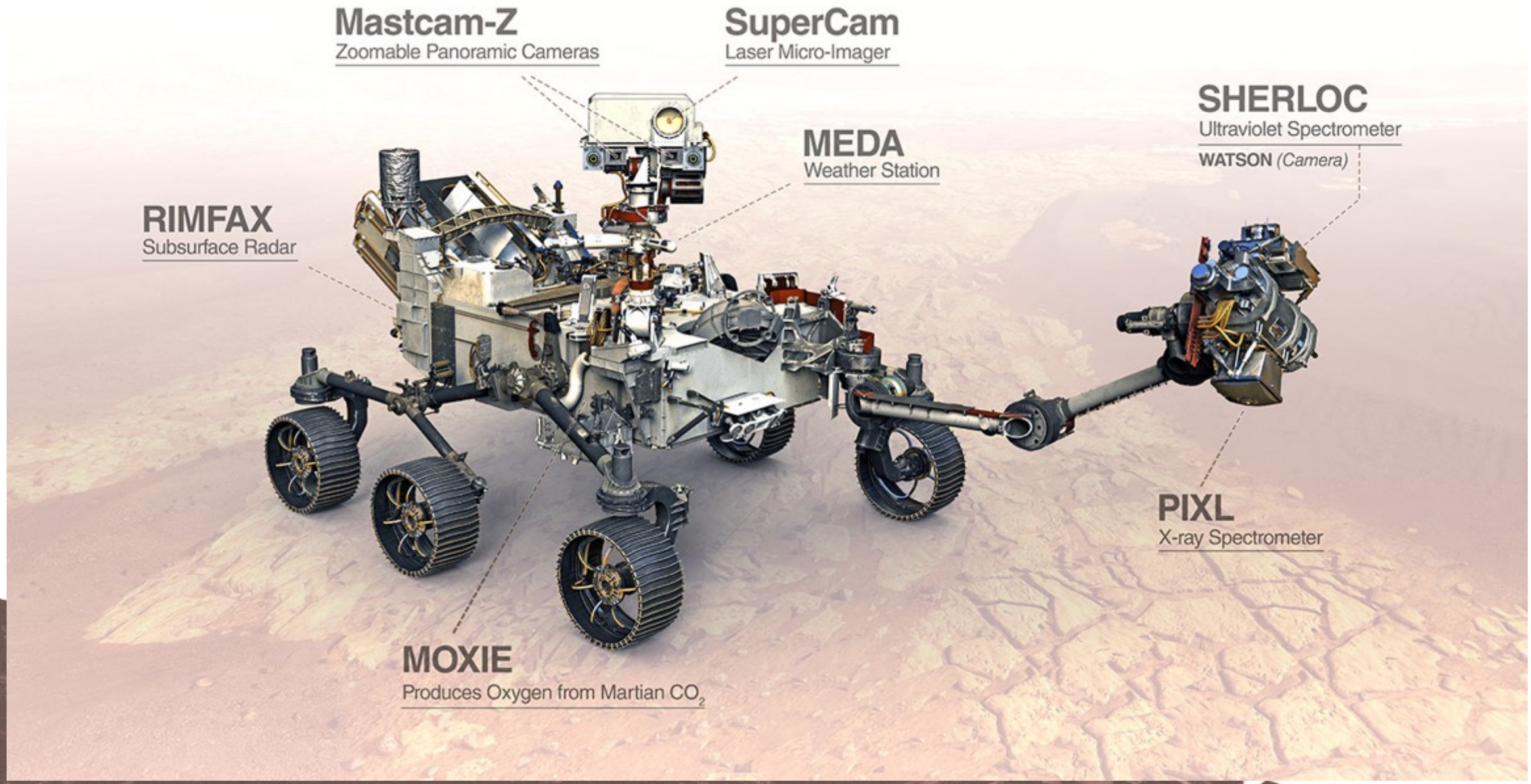

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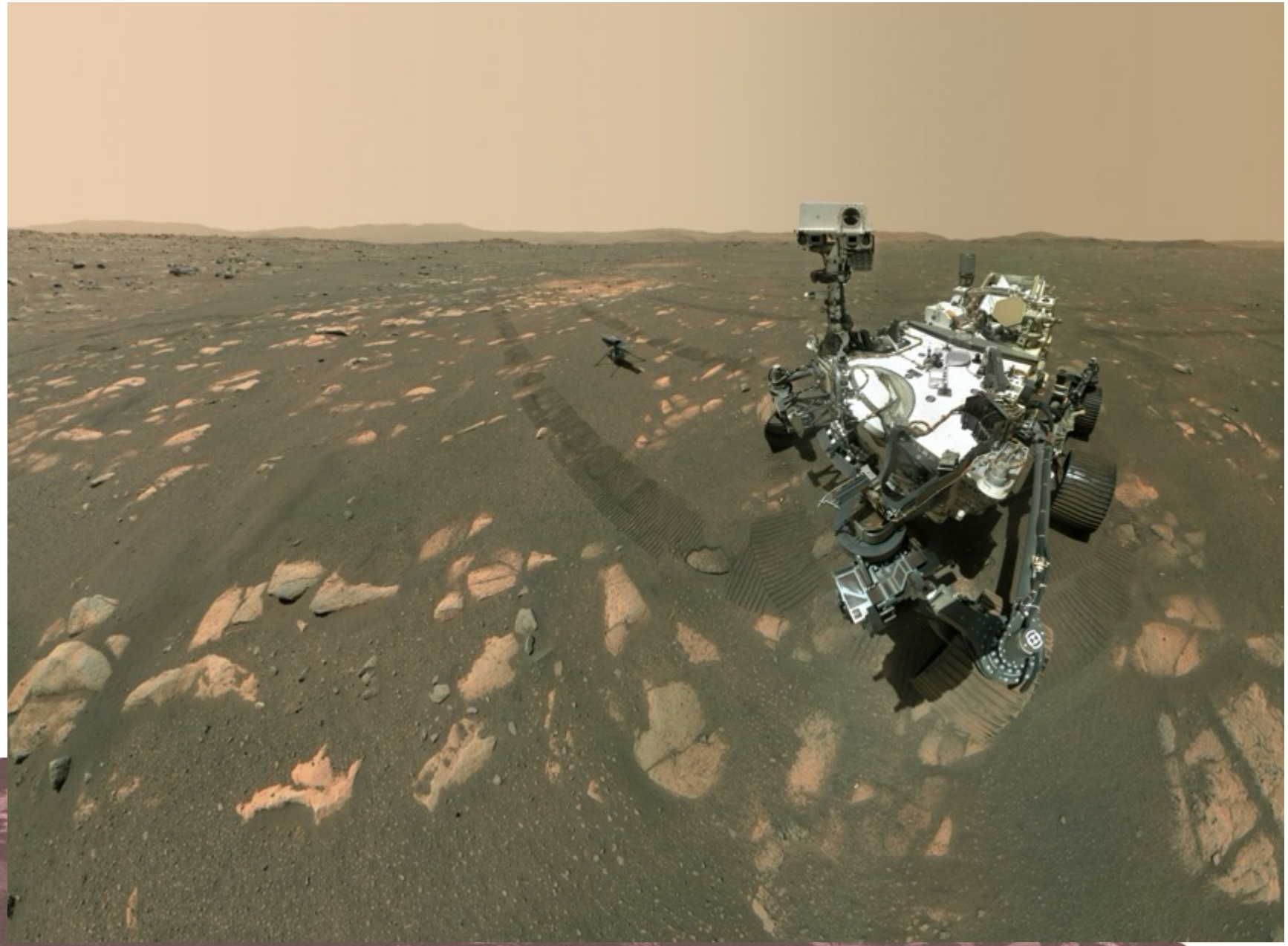

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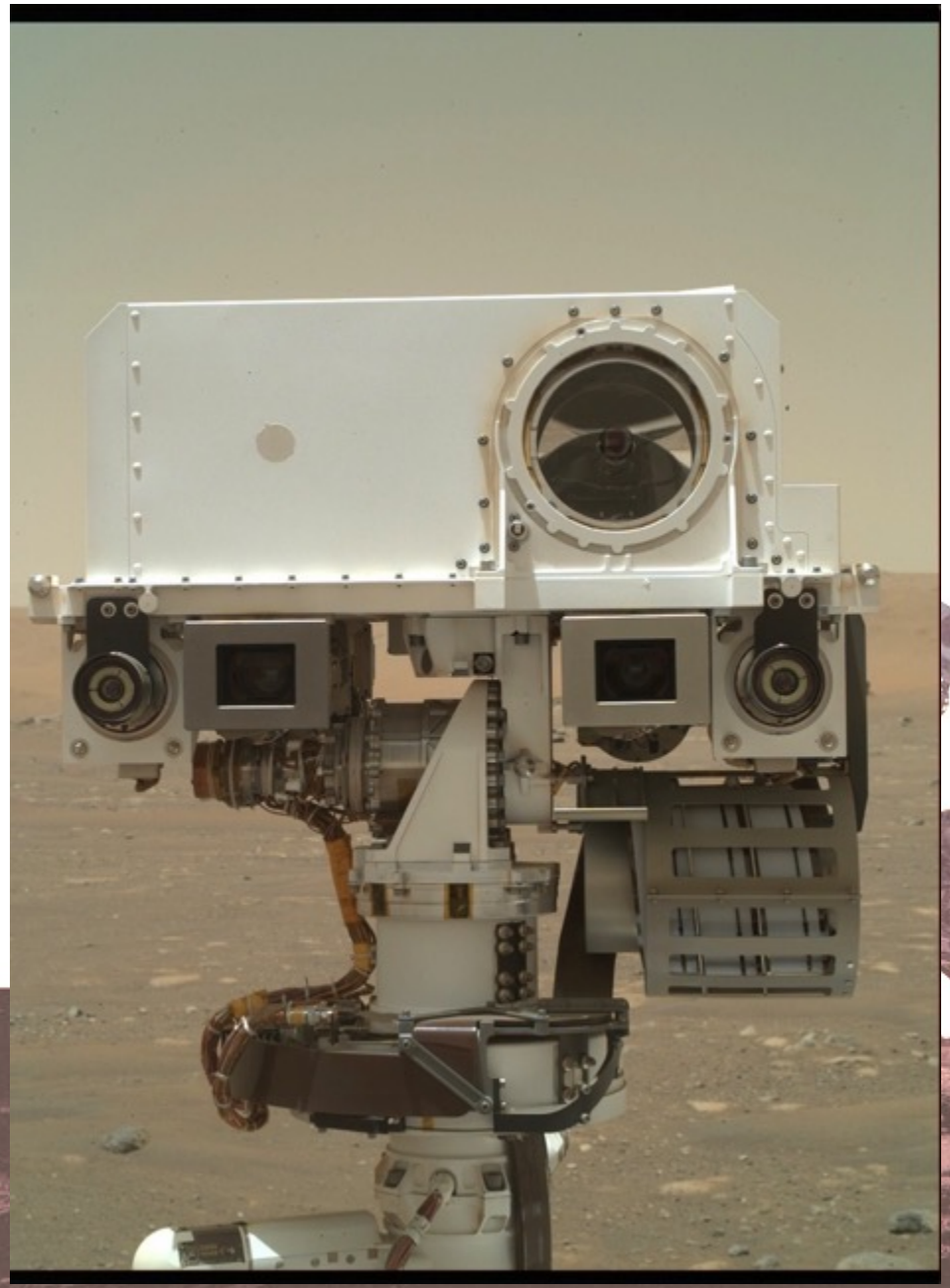

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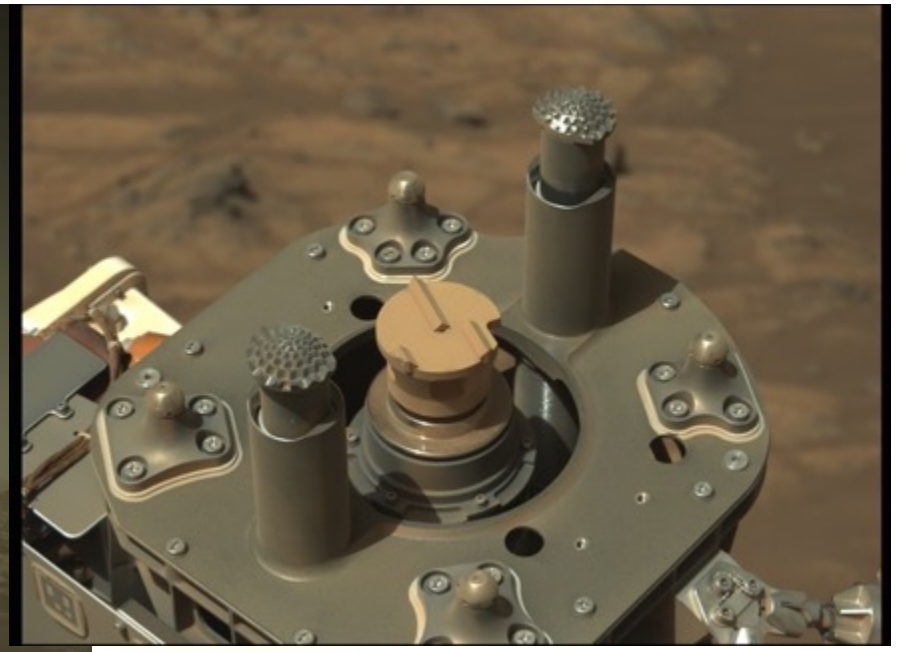

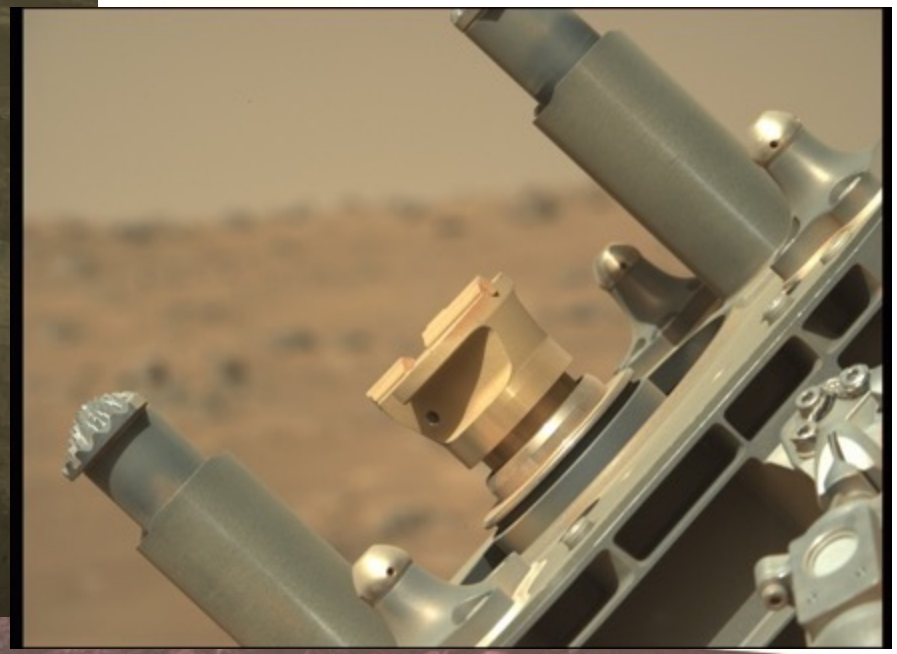

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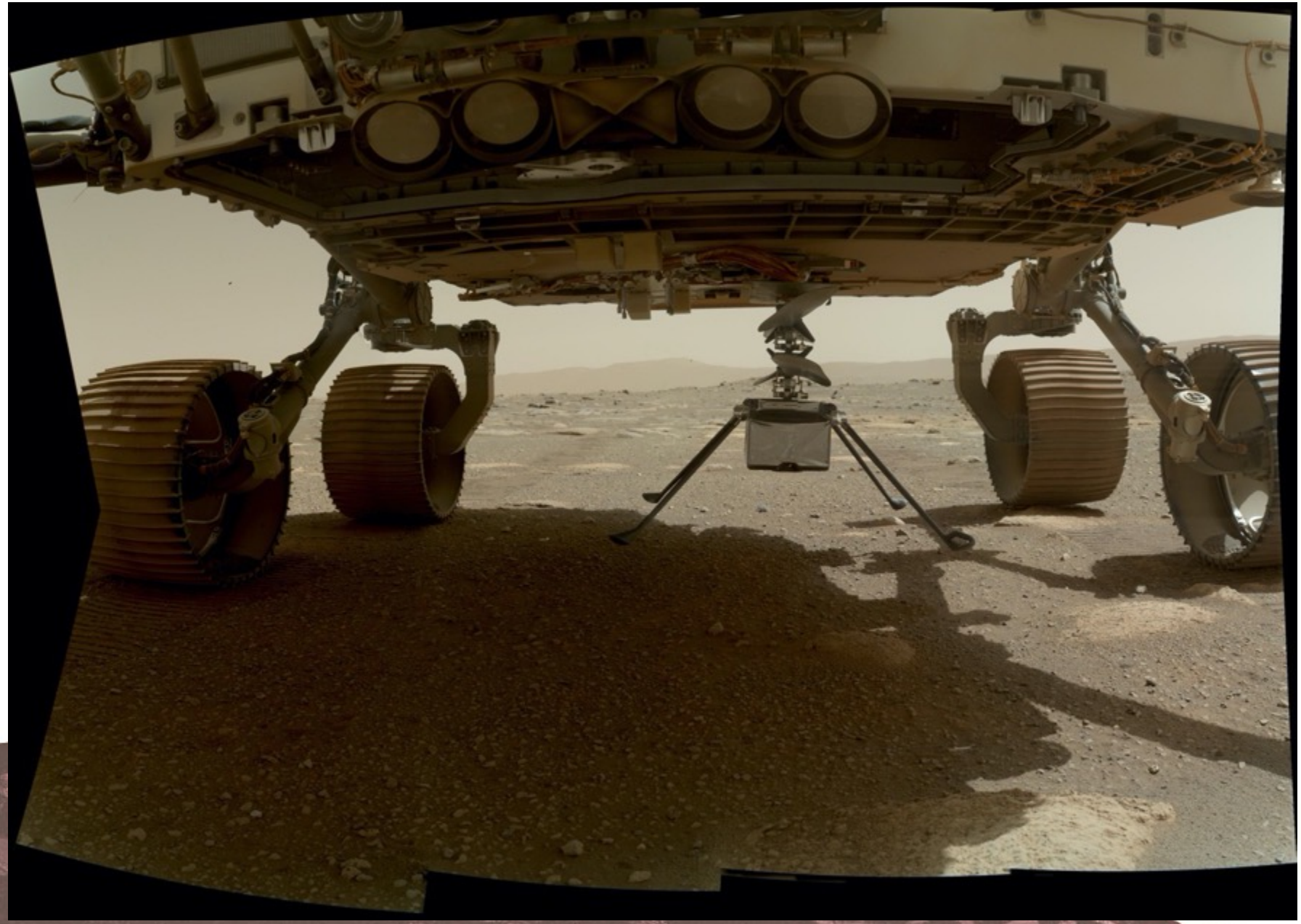

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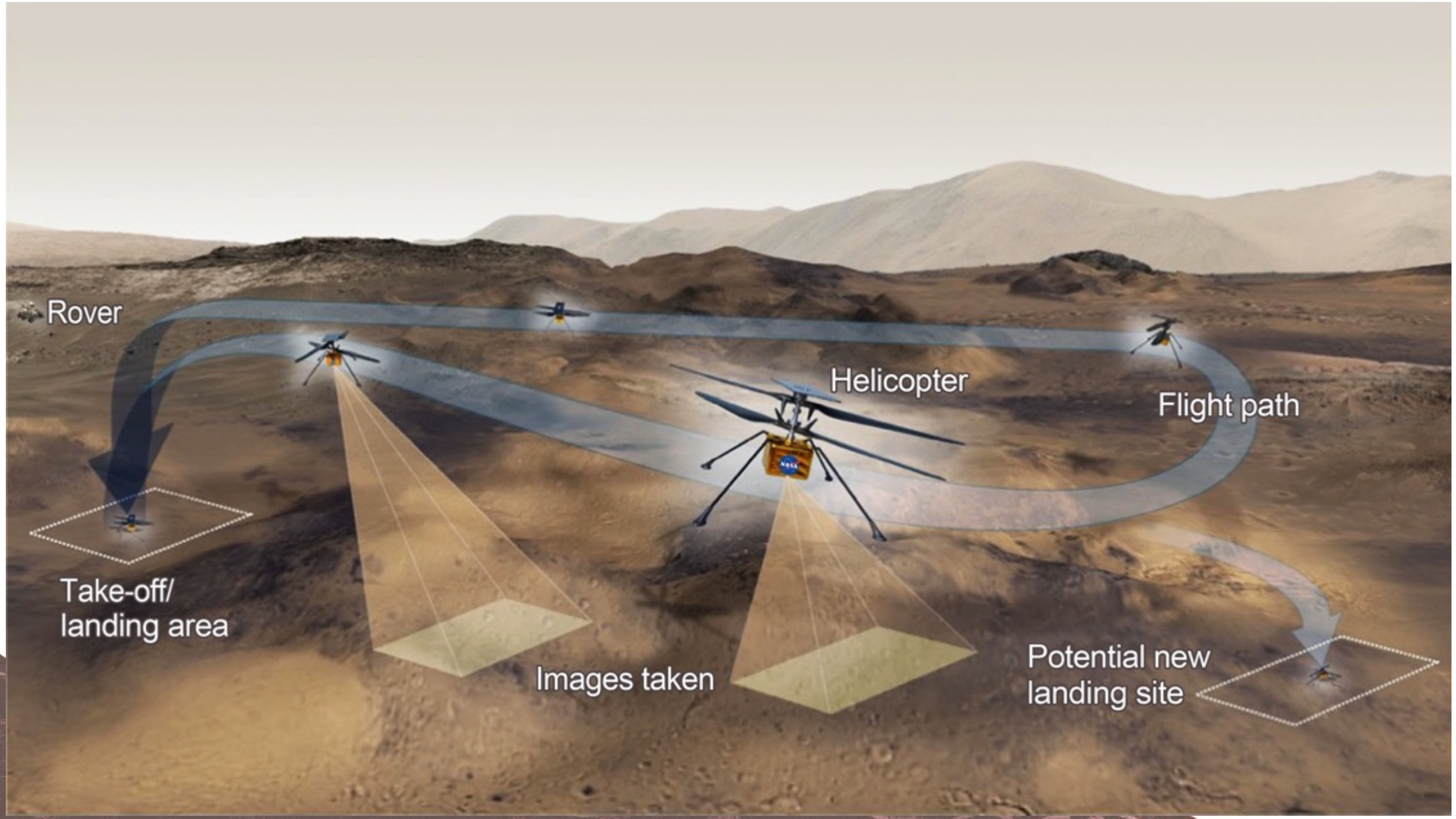

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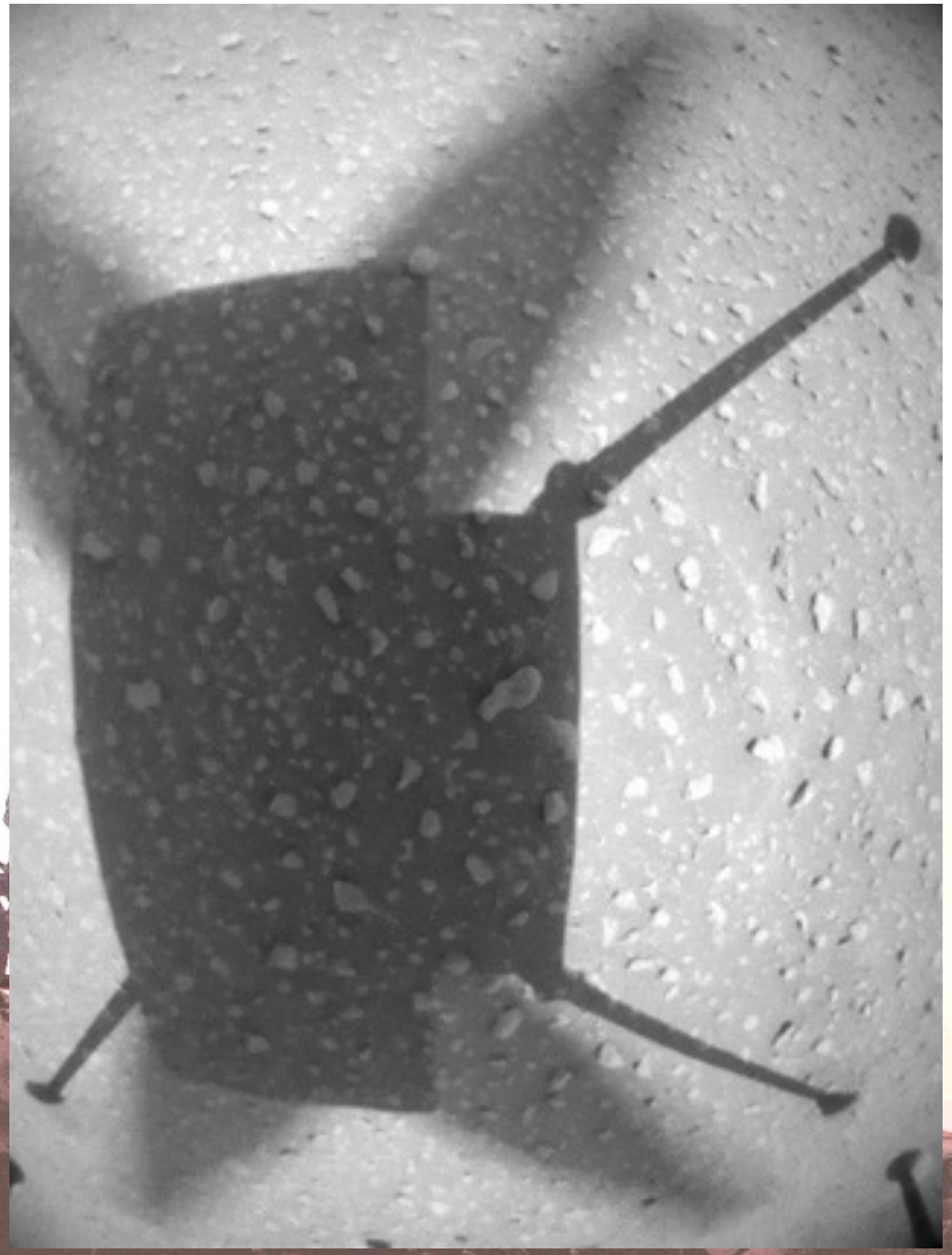

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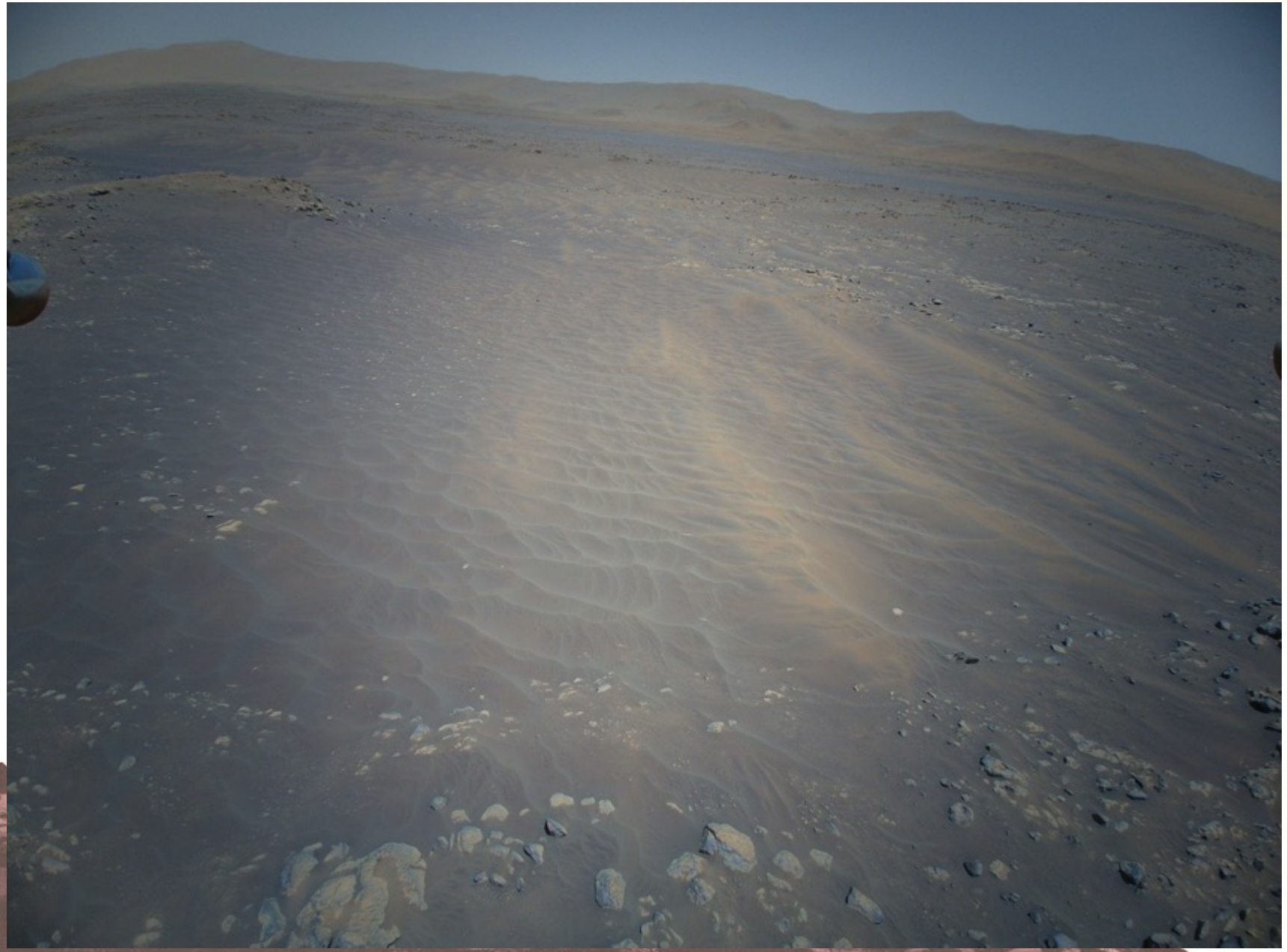

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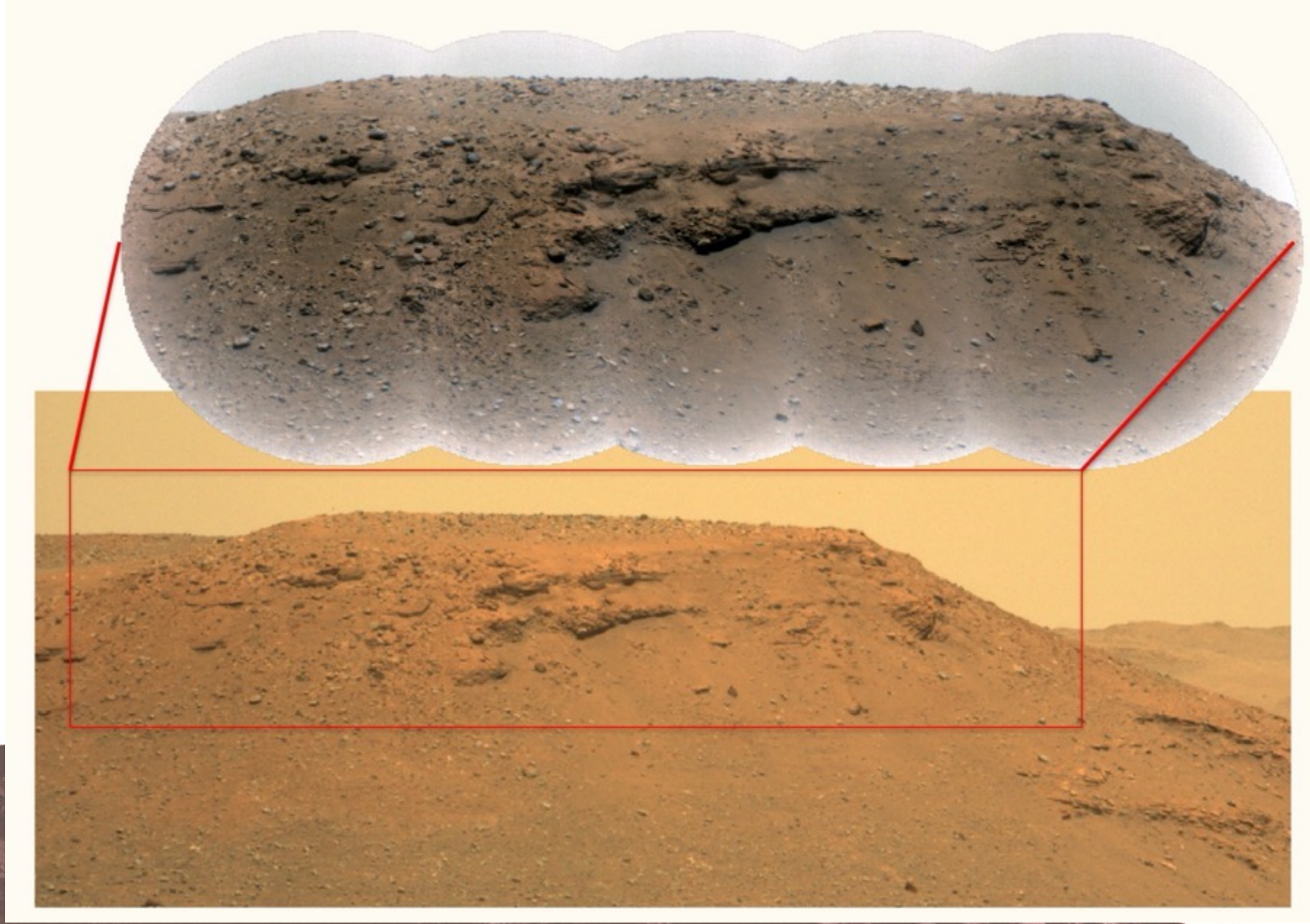

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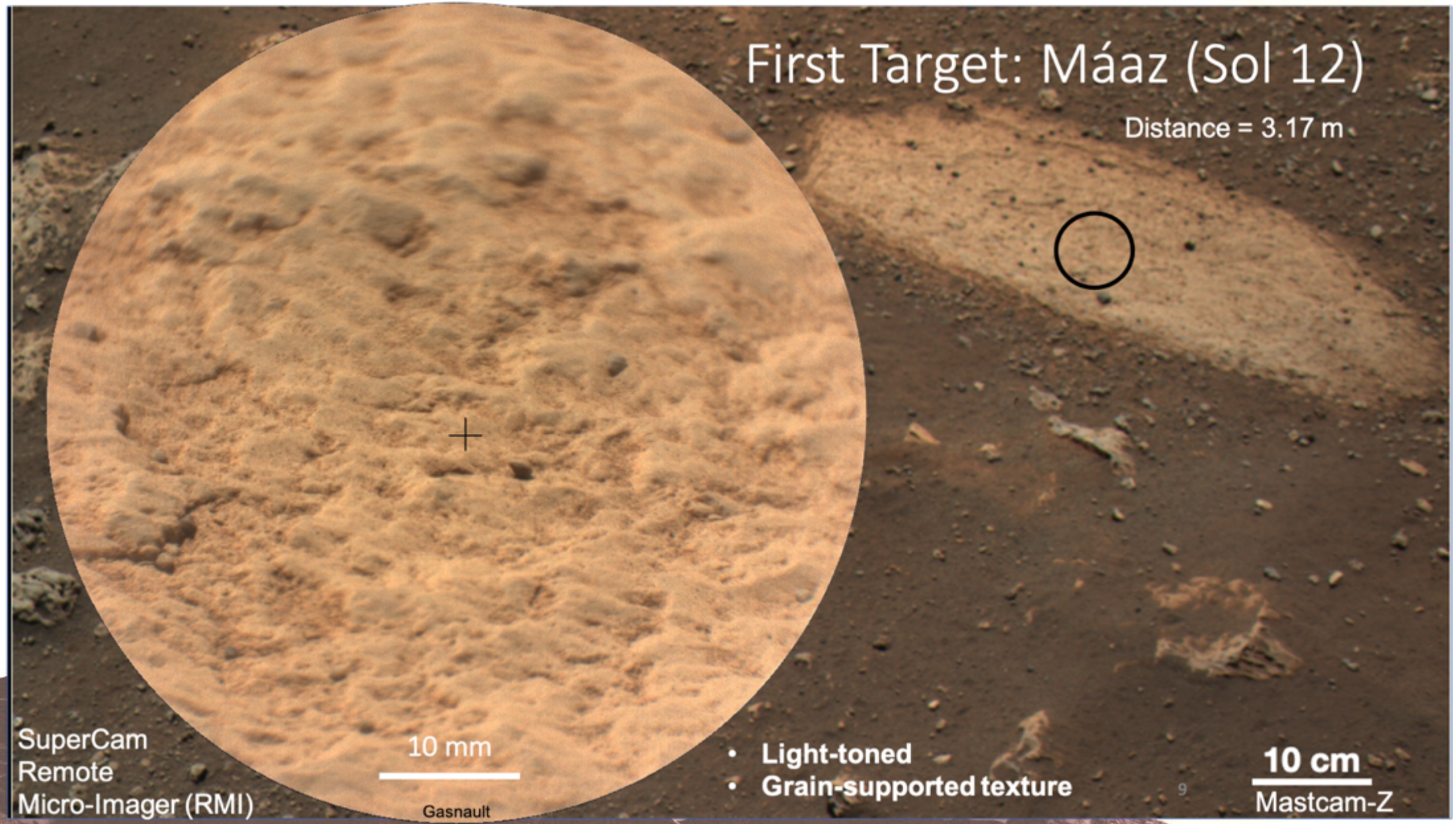

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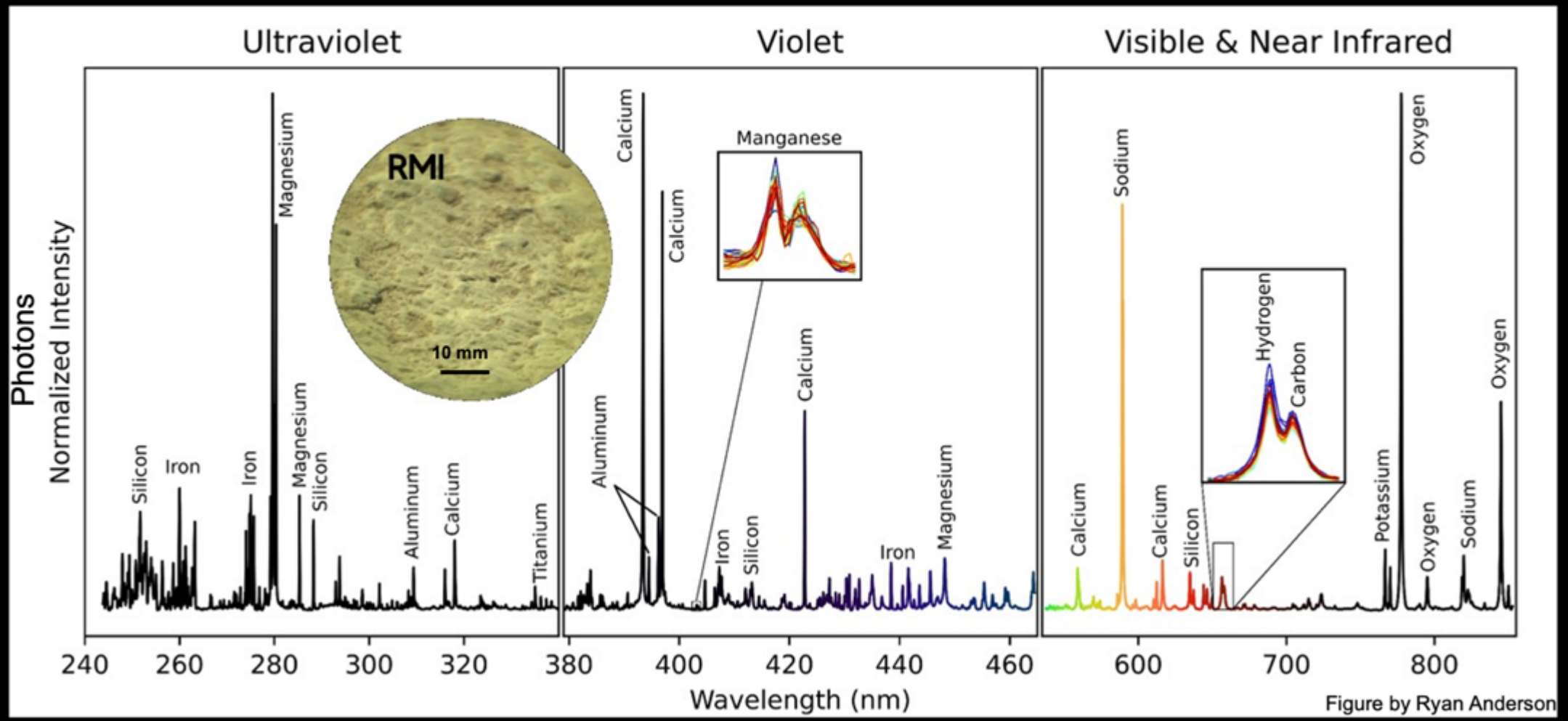
Images and information from LA-UR-21-21261

Maaz target (Sol 12)

1st SuperCam LIBS spectrum



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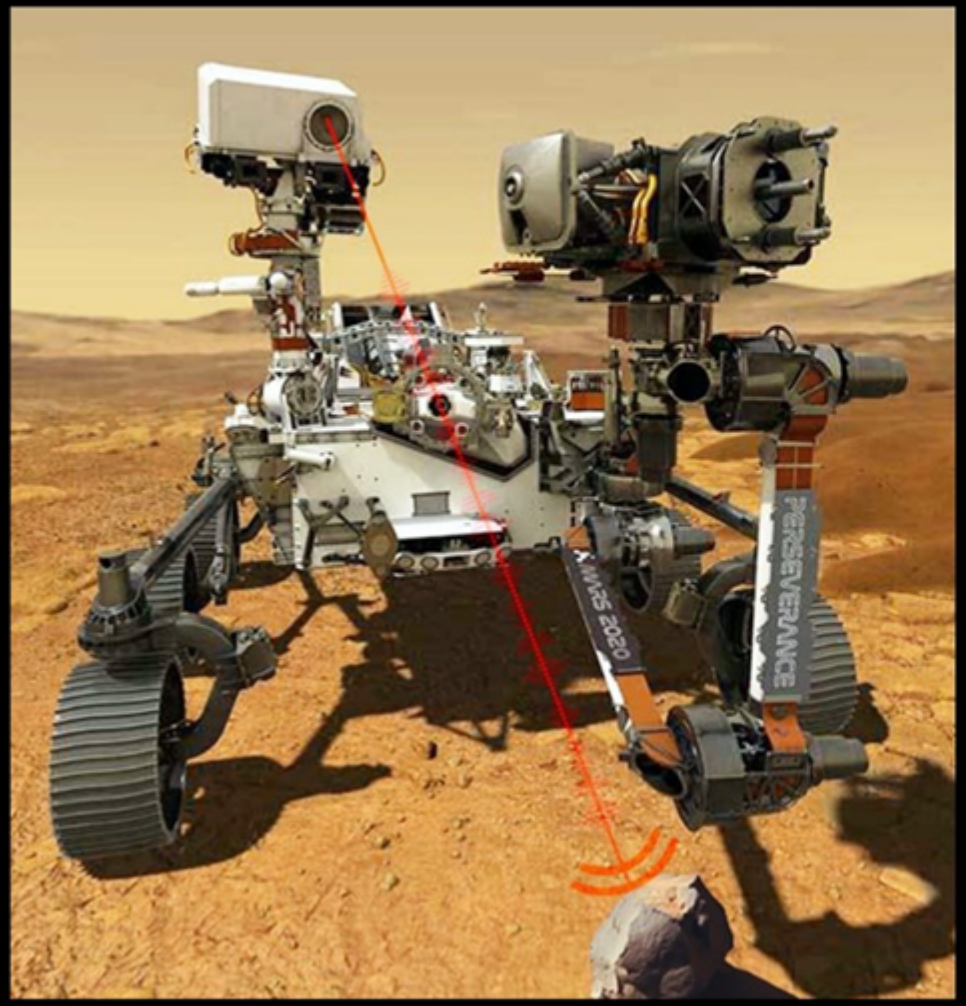
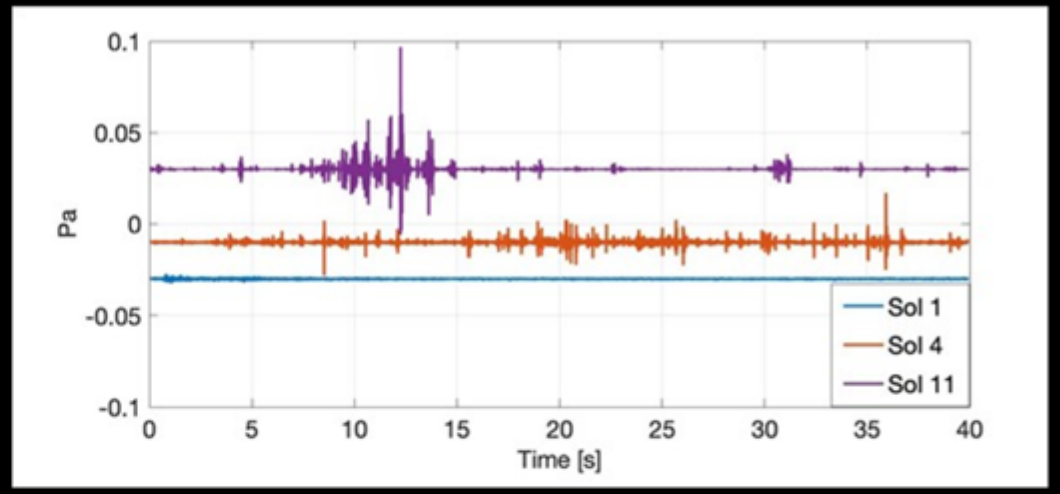
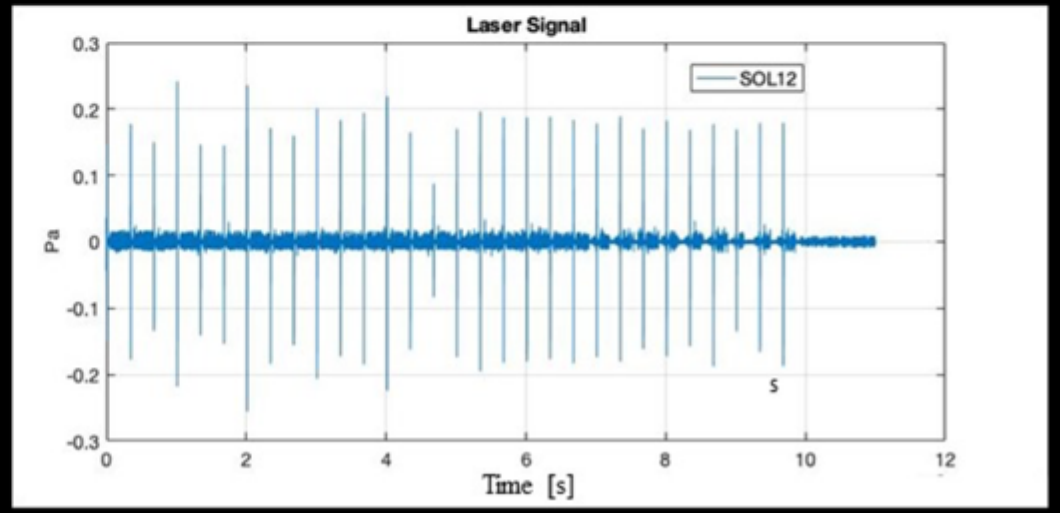
Images and information from LA-UR-21-21261

Martian acoustics





Sol 1: First recording of sounds on Mars
Sol 4: First acoustic recording of the wind
Sol 12: First recording of laser shots



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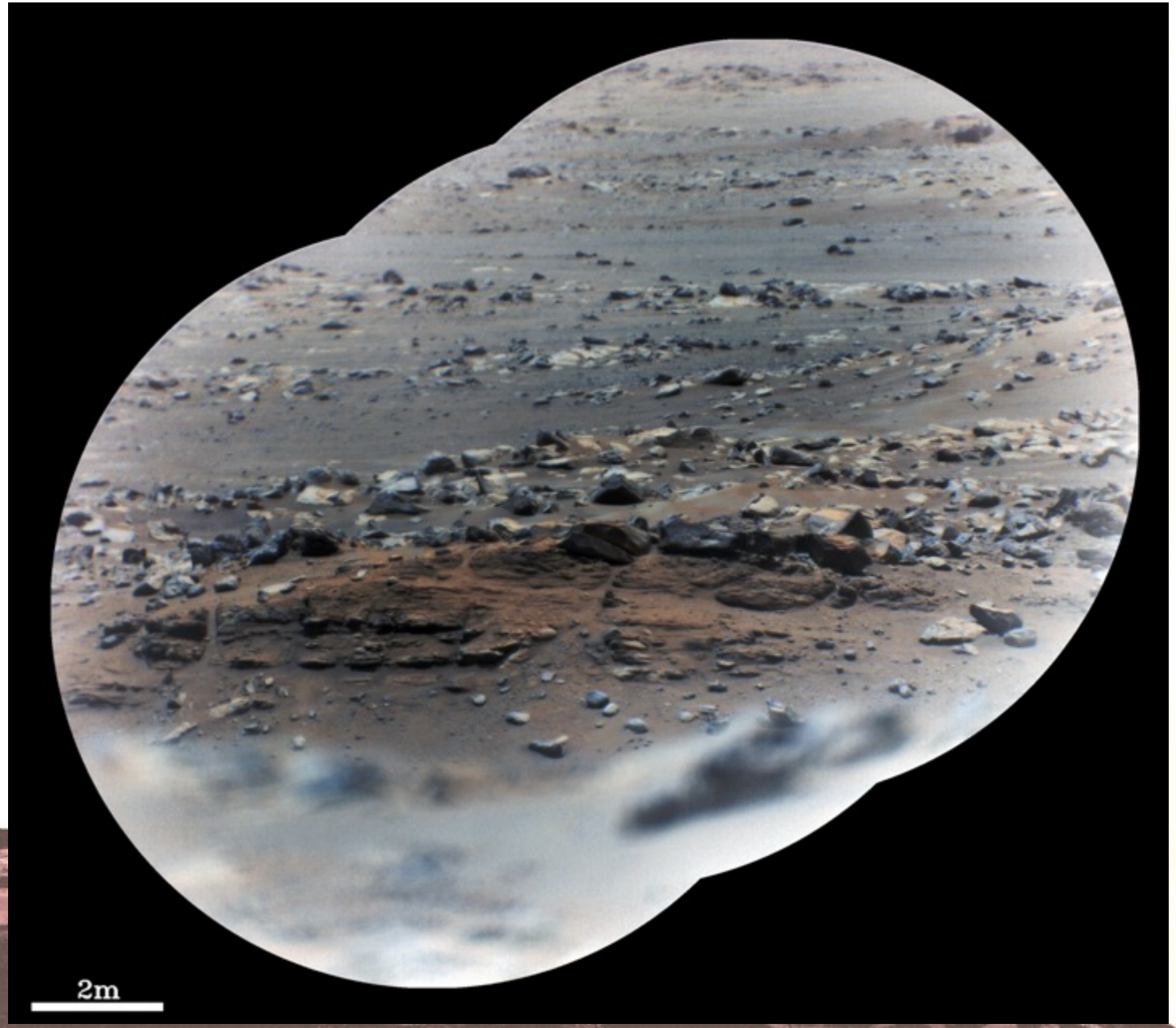

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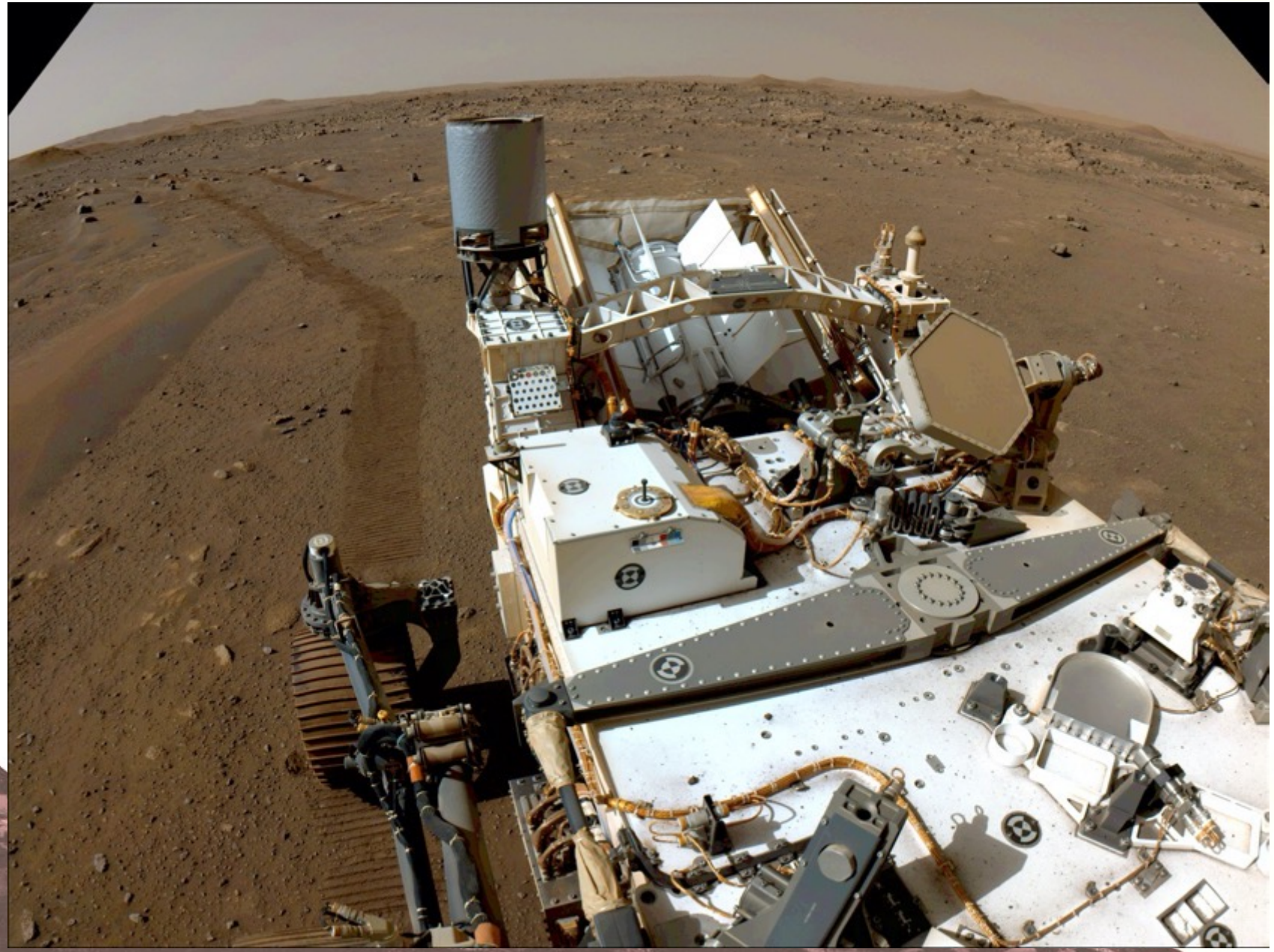

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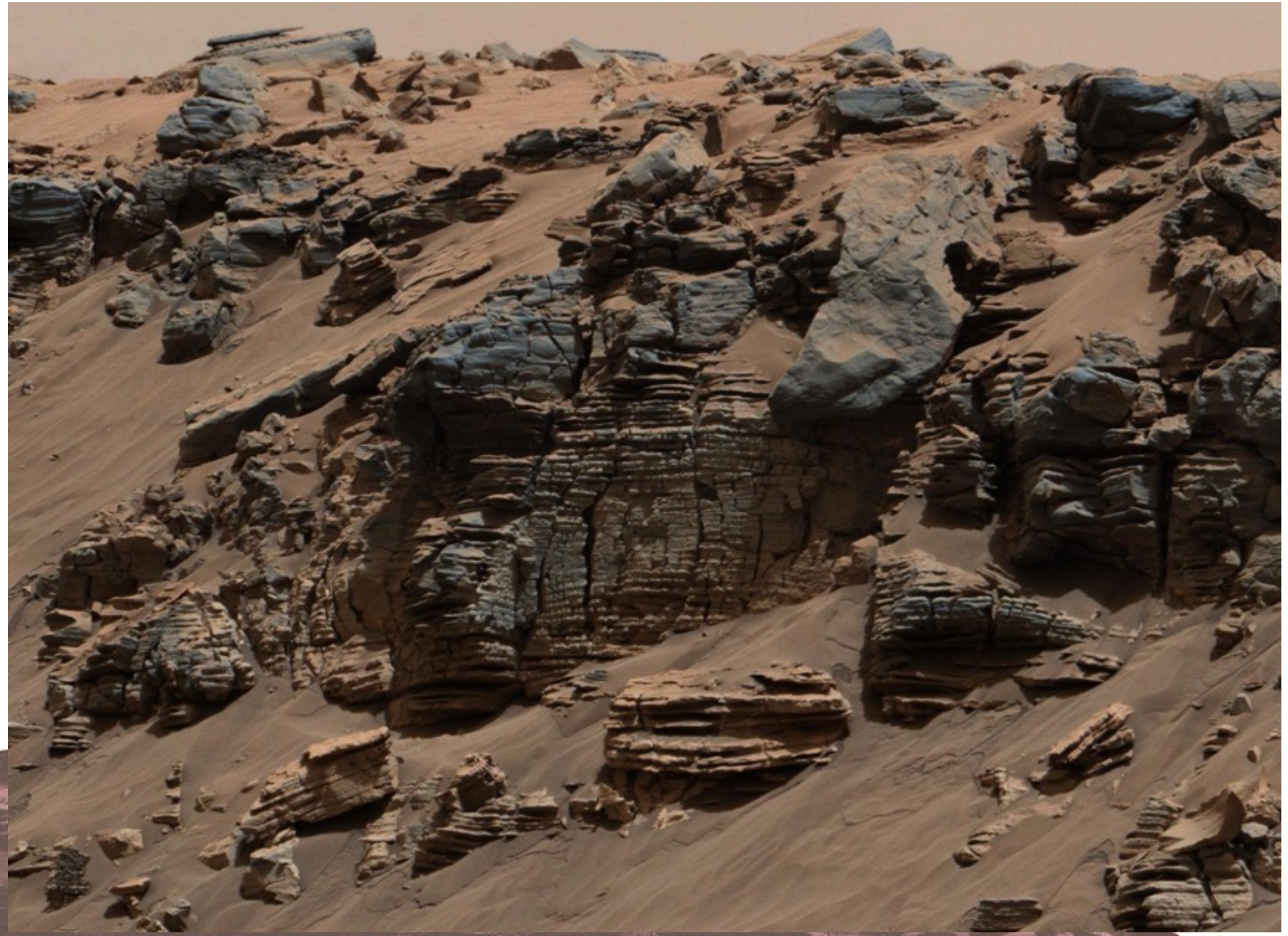

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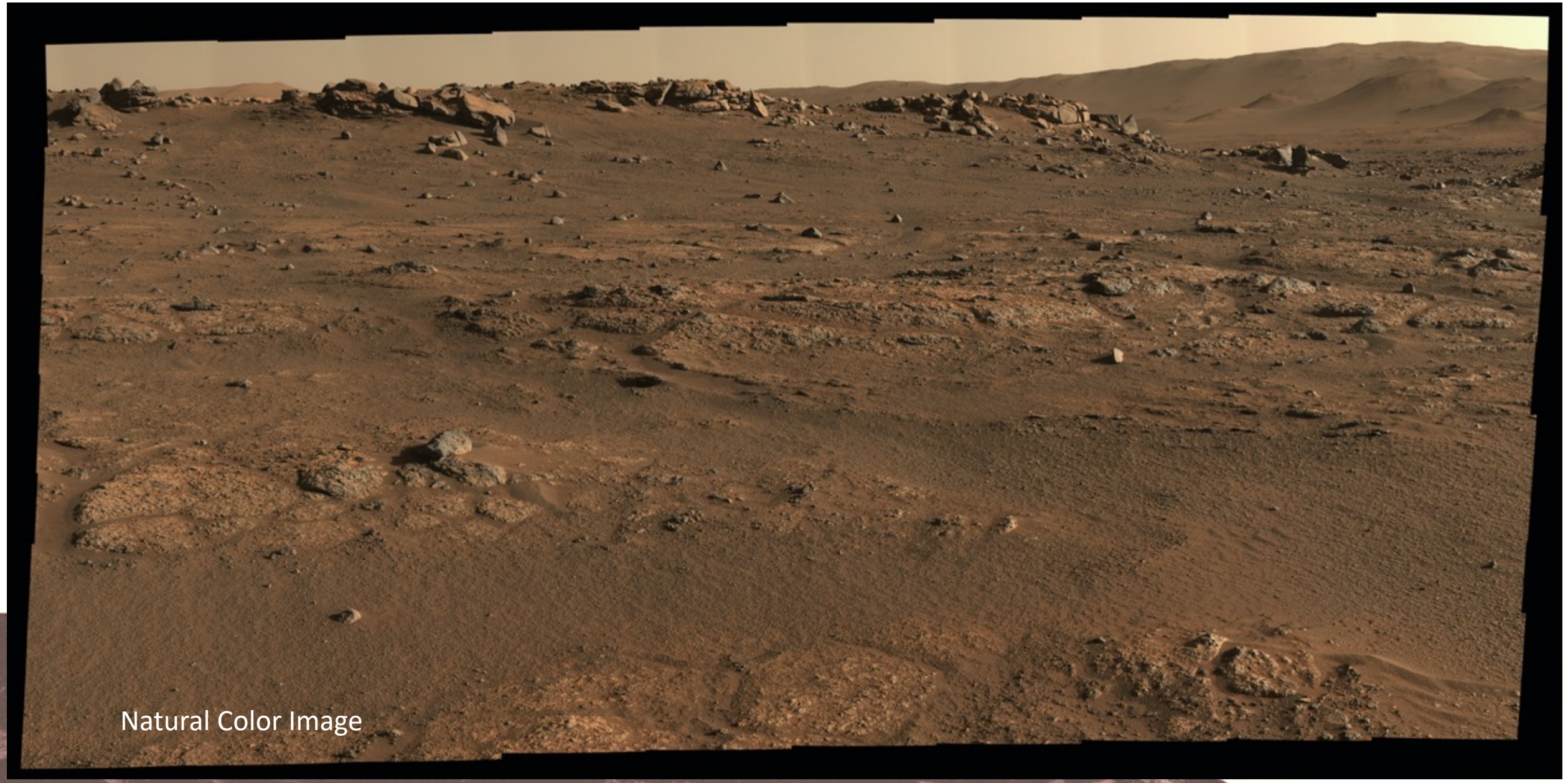

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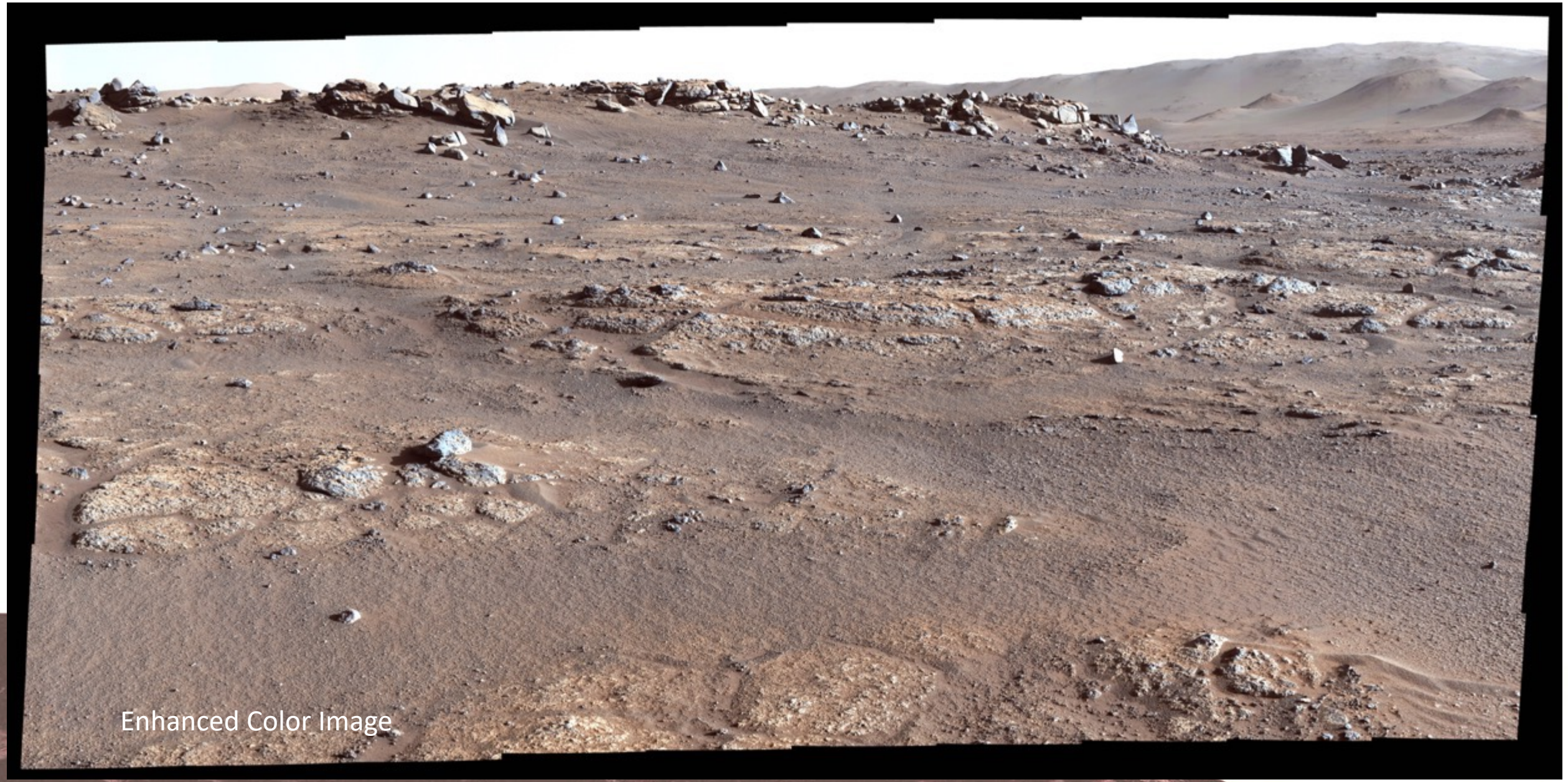

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